

REMARKS

Claims 1-10 are pending.

I. The proposed drawing corrections

As per the Examiner's instructions, flowcharts are respectfully submitted under separate cover herewith by the Applicants to illustrate the claimed invention as described in the specification. No new matter is added. For support, see at least, page 9, lines 15 - page 10 end. The flowcharts are designated Figs. 4-6. Applicants respectfully note that small handwritten amendments were included due to translation from German issues, and that overall these are informal drawings for the Examiner's review and comment.

Figs. 4 and 5 show a flowchart from the perspective of a "control unit with master capability" (3, 4).

Fig. 6 shows a flowchart from the perspective of a "control station 1". This flowchart corresponds to claims 5 and 6. The download process by which a "control unit" can be given master capability when needed is described in claims 5 and 6 and on page 4, lines 23 to 26, of the specification.

It is respectfully noted for explanation that the control station 1 is capable of shifting functionality to a control unit with master capability (3,4). This can be carried out, for example, in that runnable programs that are stored in a control unit with master capability (3,4) are activated or deactivated by command of the control station 1. Also, it is possible for runnable programs to exert a desired function to be transferred, per download, to a control unit with master capability. This is shown in Fig. 6.

It is respectfully requested that the flowcharts be considered and entered as figures.

II. The claim objections.

The claims have been amended. All of the objections have been respectfully addressed. It is respectfully requested that the claims be reconsidered. It is respectfully noted for the record that "objections" *per se* are not related to patentability.

III. The references respectfully do not teach or suggest communications method of independent claim 1 or the control system of independent claim 10.

US 5,557,097 Ortyn et al. is directed to the functionality of an automatic focusing, positioning and illumination. The communication between the individual units and component groups of the optical system is not described. However, this is what is claimed by the present invention. Therefore, Ortyn et al. does not anticipate the present claims.

US 4,539,655 Trussel et al. describes the communication of units via three (A, B, C) independent bus systems, wherein the information is conveyed from node to node. On the whole, the data transfer is carried out in a different way than claimed in the present Application because it merely travels node to node. Therefore, Trussel et al. does not anticipate the present claims.

US 5,884,072 Rasmussen describes in claim 1 a "slave controller" which independently sends data to the "master controller". Further, it is indicated that two "master controllers" communicate in a plane from which the "slave controllers" are excluded. However, the present invention claims that a control unit with master capability is introduced according to the Invention in order to provide a system with master capability from the perspective of the control station, specifically, when the lowest hardware (the "control units") are not capable of doing this independently. In claims 1 and 10, a master is introduced into the slave plane and takes over the monitoring or control via the slave. These limitations are respectfully not anticipated by Rasmussen et al. Therefore, Rasmussen does not anticipate the present claims.

US 5,978,352 Imaizumi et al. does not require the organization of the data transfer in the transfer system. In claims 1 and 10, however, a standard transmission medium is used for the data transfer. To this extent, the problems are solved in different ways. Therefore, Imaizumi et al. does not anticipate the present claims.

US 6,330,349 Hay et al. describes an automated method for measuring a specimen. The description is directed to the applications for the process and not to the structure or methods

of communication between the units or component groups as in the present Application. Therefore, Hay et al. does not anticipate the present claims.

US 6,272,235 Bacus et al. describes a possibility for processing image data of a specimen. The emphasis in this case is on the processing, particularly the compilation and management of the image data that have been obtained from a specimen. The type of communications between the units of the optical system is not described in Bacus. Therefore, there is no teaching or suggestion of the present claims. Therefore, Bacus et al. does not anticipate the present claims.


Therefore, as none of the references teach all of the limitations of the claims, it is respectfully asserted that the anticipation rejections have been traversed.

IV. Conclusion.

In light of the *FESTO* case, no claim amendment or argument made herein was related to the statutory requirements of patentability unless expressly stated herein. No claim amendment or argument made was for the purpose of narrowing the scope of any claim unless Applicant has explicitly stated that the argument is "narrowing." Thus, the amendments herein were made for no more than a "tangential relation" for any equivalents unless explicitly stated that they were not "tangential relation" reason for amendment or argument. Therefore, it is respectfully requested that all of the claims be reconsidered and allowed.

Please call the undersigned for any reason to expedite prosecution of this application.

Respectfully submitted,



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MARKED-UP SPECIFICATION

At page 6, lines 14-21 please delete the current paragraph and replace it with the following paragraph:

--In the drawings:

Fig. 1 shows a schematic view of a control system to which the invention is directed;

Fig. 2 shows the information flow during polling between the control station and the control units; [and]

Fig. 3 shows the flow of information that is substantially more advantageous by means of transferring the status determination (polling) of a slave to a control unit with master capability;

Figs. 4 and 5 show a flowchart from the perspective of a "control unit with master capability" (3, 4); and

Fig. 6 shows a flowchart from the perspective of a "control station 1".--



MARKED-UP CLAIMS

All of the claims whether amended or not are provided below for the convenience of the Examiner.

1. (Once amended) A method for monitoring a control system comprising a plurality of control units [, preferably] suitable for controlling an optical measurement device or observation device, wherein a control station communicates with the control units for purposes of detecting status data and the control station generates pictures of total statuses of the control system based on this status data, said method comprising the steps of:

incorporating at least one microprocessor unit with master capability to [in the communication] communicate between the control station and the control units; and

detecting status data using said at least one microprocessor unit with master capability [communicating] to communicate with at least one of the control units for purposes of detecting status data of the at least one control unit; and

communicating with the control station for purposes of conveying the detected status data to the control unit.

2. The method according to claim 1, wherein the incorporation is carried out within time limits.

3. (Once amended) The method for monitoring a control system as set forth in claim 1,

wherein [the capability of] detecting the status data is accomplished by [transferred] transferring a master capability partially and/or within time limits from the control station to at least one of the plurality control units to create a control unit with master capability,

wherein the [at least one] control unit with master capability communicates with at least one of the other control units of the plurality of control units [for purposes of detecting] to detect status data of at least one of the other control units; and

communicates with the control station for purposes of conveying [the] detected status data to the control station.

4. (Once Amended) The method according to claim 1, wherein at least one control units with master capability and the plurality of control units without master capability are interconnected via a bus,

and the control station communicates with the rest of the control units via a two-path connection to one of the at least one control units with master capability, wherein [the] a capability of detecting status data is assigned to [one or more of the existing] the at least one control units with master capability.

5. (Once Amended) The method according to claim 3, wherein the transferring a master capability [the transfer of capability of] for detecting status data of at least one of the other control units is carried out using existing communications paths by downloading corresponding executable programs from the control station [to the respective control unit] to the at least one of the plurality control units to create a control unit with master capability.

6. (Once amended) The method according to claim 3, wherein a step of assigning and/or taking away [the] a capability of detecting the status data using existing communications paths is carried out by activating or deactivating executable programs which are stored in the [respective] control unit or which are transmitted by downloading.

7. (Once amended) The method according to claim 1, wherein the detection of status data by the microprocessor unit with master capability or by the [enabled] control unit is brought about when changes in status occur in [the associated] the at least one of the plurality control units.

8. The method according to claim 1, wherein the status data detected by the microprocessor unit with master capability or by the enabled control unit are transmitted to the control station when called up.

9. The method according to claim 2, wherein the status data detected by the microprocessor unit with master capability or by the enabled control unit are transmitted to the control station at predetermined time intervals.

10. (Once Amended) A control system [, preferably] suitable for controlling an optical measurement device or observation device with parts to be controlled comprising:

a plurality of control units for controlling the parts;

a control station which, when required, generates a map of the overall status of the control system based on status data of the [individual] plurality of control units; and

at least one of the plurality of control units having [the] a master capability of detecting and/or automatically assessing status data of [associated] other control units of the plurality of control units and transmitting the detected status data and a determined assessment to the control station.